

**HANDBOOK CHANGE  
BULLETIN**  
CUSTOMER ENGINEERING

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BOOK: MH2386 UNIVAC COMMUNICATIONS/SYMBIONT  
PROCESSOR SYSTEM PREINSTALLATION  
PLANNING SPECIFICATIONS

October 17, 1974

Contained in the following handbook:  
Branch Library HB 1728 Miscellaneous Installation Planning Books, Volume 4

HCB-6

DESCRIPTION OF CHANGES

NOTE: Vertical bars in the margins of the attached revised pages indicate where maintenance data has been added, deleted, or revised. A new page that contains new or revised data or a page that was completely rewritten will have a vertical bar adjacent to the page number only. A new page containing no new or revised data will only carry the new revision level at the bottom of the page.

Heading 3-4. System Cable Orders  
Added new table information.

Table 3-1. Communications/Symbiont Processor Cabling  
Added table showing system and subsystem cable part numbers.

Figure 3-1. UNIVAC Communications/Symbiont Processor System Cable Ordering Information  
Deleted cable part numbers from page and added find numbers for table 3-1.  
Added new information to page to include the U - 100.

INSTRUCTIONS

All revised pages are labeled REVISION: HCB-6

Remove Pages	Insert Pages
iii/iv 3-1 thru 3-4	iii/iv 3-1 thru 3-9

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## SECTION 3

### FORMS AND MATERIALS PREPARATION

#### 3-1. GENERAL

This section contains information for completing the forms required in the course of planning a system installation. The required forms are contained in MH2367, UNIVAC Communications/Symbiont Processor System Preinstallation Planning Materials. Accuracy and completeness is essential when completing these forms as any discrepancy could possibly cause incomplete or untimely shipment of equipment.

For more detail on forms and cable ordering information refer to the preinstallation planning specifications for the central processing system.

#### 3-2. SHIPPING AND INSTALLATION PLANNING REPORT

This form must be completed and forwarded to the appropriate Univac location (see heading 3-10) at least six weeks prior to system delivery. This form is required so that shipping arrangements may be made with the carrier, and the shipping department can be notified of any required special crating, etc.

Additional copies of these forms (UDI-1843, UDI-1843A, USI-1843B, and UDI-1843C) may be obtained from Division Forms Control, P.O. Box 500, Blue Bell, Pennsylvania, 19422.

#### 3-3. POWER AND COOLING SPECIFICATION SUMMARY

Provide a power and cooling summary to the user of this particular system configuration. Include all possible future expansions to the system. List each type of cabinet in the system configuration and total the power and cooling requirements.

#### 3-4. SYSTEM CABLE ORDERS

The cable order must be submitted at least 90 days before system delivery. If cable orders are not submitted to the appropriate Univac location on time, the system may be shipped with missing cables. Do not hold a cable order for lack of defining a small portion of the cable requirements. Request assistance from Technical Operations or submit the remainder of the order with a notation indicating the missing requirements. Information for completing the cable order form is provided in table 3-1 and figure 3-1, and by the Cabinet Specifications Sheets. ■

An example of a partially completed System Cable Order Form is shown in figure 3-2.

Table 3-1. Communications/Symbiont Processor, Cabling

FIND NO.	FROM	TO	PART NUMBER	QUANTITY	MAXIMUM LENGTH	REMARKS
SYSTEM CABLES						
1	C/SP Processor Type 3021	Maintenance Controller Type M1920	4141595-xx	4	120'	
2	C/SP Processor Type 3021	Storage Type 7010/7018 or 7026	See Remarks			Cables furnished with memory
3	C/SP Processor Type 3021	Card Reader Type 0708	3619419-xx	1	50'	Signal Cable
4	C/SP Processor Type 3021	Card Reader Type 0708	3619421-xx	1	50'	Power Cable
5	C/SP Processor Type 3021	GPCC No. 1 Type 8542	3619428-02	2		
6	C/SP Processor Type 3021	GPCC No. 1 Type 8542	3619427-00	1		
7	C/SP Processor Type 3021	GPCC No. 2 Type 8542	3619428-03	2		
8	C/SP Processor Type 3021	GPCC No. 2 Type 8542	3619427-00	1		
9	C/SP Processor Type 3021	Adapter Channel F1276 (Feature No. 1)	3619428-00	2		
10	C/SP Processor Type 3021	Adapter Channel F1276 (Feature No. 1)	3619427-00	1		Add 2 each (cables) part no. 3619443-00 if this is the <u>only</u> feature installed in the cabinet
11	C/SP Processor Type 3021	Feature No. 2 F1273/F1274 and/or F1276	3619428-01	2		
12	C/SP Processor Type 3021	Feature No. 2 F1273/F1274 and/or F1276	3619427-00	1		Add 2 each (cables) part no. 3619443-06 if this is the <u>last</u> feature installed in the cabinet.

## Forms and Material Preparation

Table 3-1. Communications/Symbiont Processor, Cabling (Continued)

FIND NO.	FROM	TO	PART NUMBER	QUANTITY	MAXIMUM LENGTH	REMARKS
SYSTEM CABLES						
13	C/SP Processor Type 3021	Feature No. 3 F1273/F1274 and/or F1276	3619428-01	2		
14	C/SP Processor Type 3021	Feature No. 3 F1273/F1274 and/or F1276	3619427-00	1		Add 2 each (cables) part no. 3619443-07 if this is the <u>last</u> feature installed in the cabinet
15	C/SP Processor Type 3021	Feature No. 4 F1273/F1274 and/or F1276	3619428-01	2		
16	C/SP Processor Type 3021	Feature No. 4 F1273/F1274 and/or F1276	3619427-00	1		Add 2 each (cables) part no. 3619443-08 if this is the <u>last</u> feature installed in the cabinet
17	C/SP Processor Type 3021	Feature No. 5 F1273/F1274 and/or F1276	3619428-01	2		
18	C/SP Processor Type 3021	Feature No. 5 F1273/F1274 and/or F1276	3619427-00	1		Add 2 each (cables) part no. 3619443-07 if this is the <u>last</u> feature installed in the cabinet.
19	GPCC No. 2 Type 8542	GPCC No. 1 Type 8542	3619443-18	2		
20	GPCC No. 1 Type 8542	Adapter Channel F1276 (Fea- ture No. 1)	3619443-10	2		
21	Adapter Channel F1276 (Feature No. 1)	Feature No. 2 F1273/F1274 and/or F1276	3619443-07	2		
22	Feature No. 2 F1273/F1274 and/or F1276	Feature No. 3 F1273/F1274 and/or F1276	3619443-00	2		

Communications/Symbiont Processor

Table 3-1. Communications/Symbiont Processor, Cabling

FIND NO.	FROM	TO	PART NUMBER	QUANTITY	MAXIMUM LENGTH	REMARKS
23	Feature No. 3 F1273/F1274 and/or F1276	Feature No. 4 F1273/F1274 and/or F1276	3619443-04	2		
24	Feature No. 4 F1273/F1274 and/or F1276	Feature No. 5 F1273/F1274 and/or F1276	3619443-00	2		
SUBSYSTEM CABLES						
25	GPCC Type 8542	Modem	3619424-xx	1 See Remarks	50'	1 each per CLT
26	GPCC Type 8542 - CLT F1292-01	Modem	3619426	1 See Remarks	50'	For CLT F1292-01, order this cable
27	GPCC Type 8542-- CLT F1291-04	Modem	2811487	1 See Remarks	50'	For CLT F1291-04 order this cable
28	GPCC Type 8542	U 100 Type Type 3536	2811650	1	50'	Direct cable, A U 100 equipped with feature F1245-00 connects directly to F1291
29	GPCC Type 8542	Junction Box	2811649	1		
31	"J" Box (Junction Box) See Hardware	"J" Box (Junction Box) See Hardware	2807725	1		The line speed is limited by the length of cable Bit/Sec. Cable length 2400 - 3000' 4800 - 2000' 9600 - 1000'
32	"J" Box (Junction Box)	U 100 Type 3536	2807723	1		
33	Adapter Channel F1276 (Feature No. 1)	418 III I/O Channel	4122538-xx	1		Input 18 Bit

Table 3-1. Communications/Symbiont Processor Cabling

FIND NO.	FROM	TO	PART NUMBER	QUANTITY	MAXIMUM LENGTH	REMARKS
SUBSYSTEM CABLES						
33	Adapter Channel F1276 (Feature No. 1)	418 III I/O Channel	4139728-xx	1		Input 36 Bit
33	Adapter Channel F1276 (Feature No. 1)	494, 1106, 1108, or 1110 I/O Channel	4139728-xx	1	200'	Input
34	Adapter Channel F1276 (Feature No. 1)	418 III I/O Channel	4122538-xx	1		Output 18 Bit
34	Adapter Channel F1276 (Feature No. 1)	418 III I/O Channel	4139729-xx	1		Output 36 Bit
34	Adapter Channel F1276 (Feature No. 1)	494, 1106, 1108, or 1110 I/O Channel	4139729-xx	1	200'	Output
35	Feature No. 2 F1273/F1274	9000 Series MUX/SEL Peripheral	3616164-xx	1	200' See Remarks	(a) Use 1 each on MUX/SEL channel for each peripheral or control unit. (b) Maximum total accumulated cable length per MUX/SEL is 200' (Sum of cable length between channel and first peripheral cabinet plus lengths between all other peripheral cabinets on the channel). Up to 8 control units may be connected to the MUX/SEL Channels.



Communications/Symbiont Processor

Table 3-1. Communications/Symbiont Processor Cabling (Continued)

FIND NO.	FROM	TO	PART NUMBER	QUANTITY	MAXIMUM LENGTH	REMARKS
ASSEMBLIES						
			3614529	2		Terminating cards. The last CU of the 9000 Series MUX/SEL Peripheral must be terminated using these 2 cards
HARDWARE						
30	"J" Box Junction Box		2807819	2		Connector Box used to expand the interface cable length between the GPCC and U 100

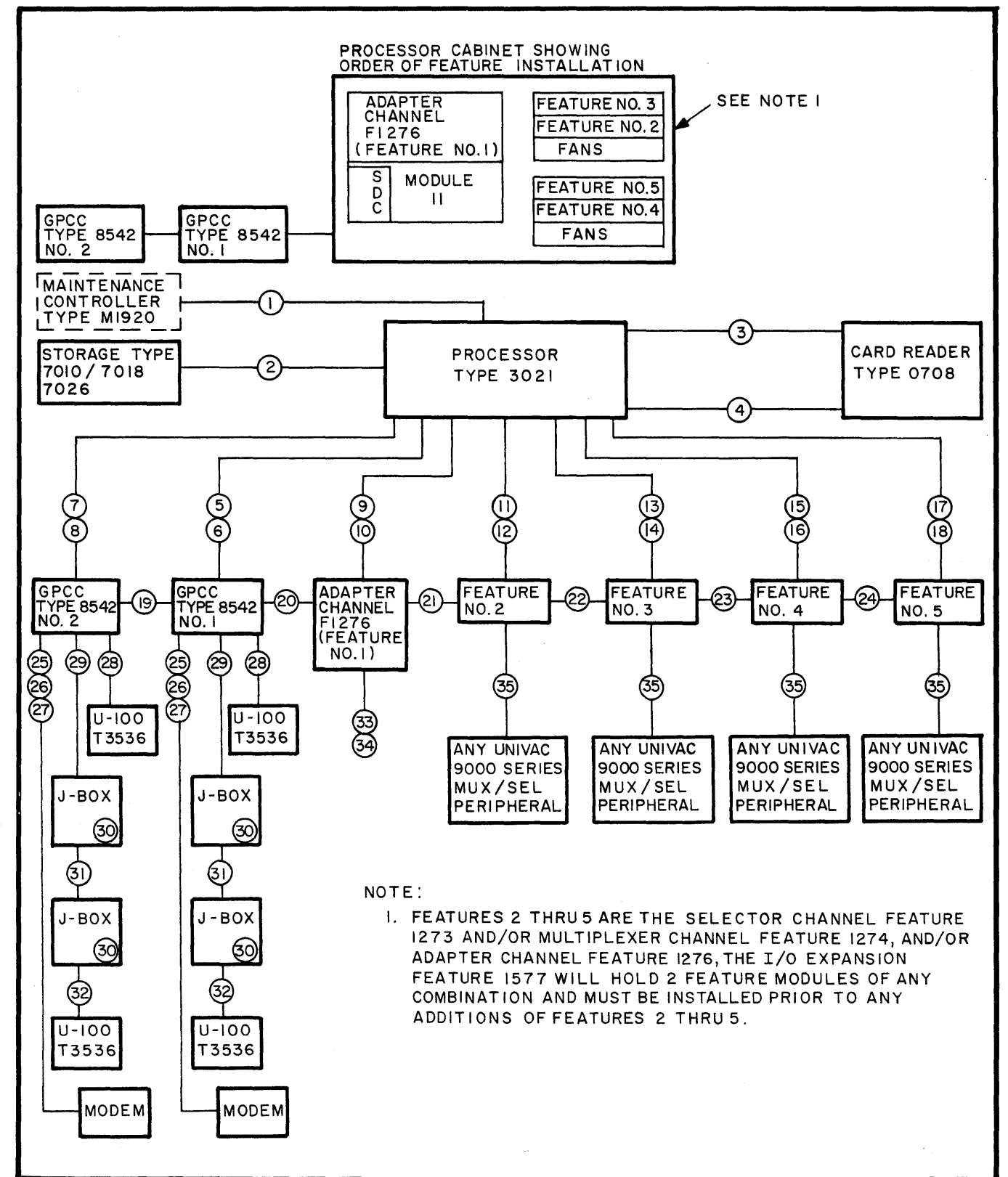


Figure 3-1. UNIVAC Communications/Symbiont Processor System Cable Ordering Information

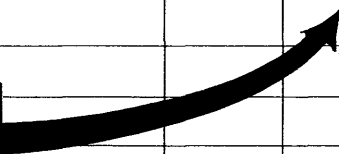
UNIVAC

UNIVAC® C/SP SYSTEM CABLE ORDER FORM

CUSTOMER NAME ABC Company	ADDRESS 8100 State Street Anytown, Ohio 19720	SALES ORDER NO. 12345-678-9876
PREPARED BY John Doe		DATE 3/2/72
		REV. -
		SHEET 1 of 1

FROM	CABINET IDENT.	TO	CABINET IDENT.	CABLE PART NO.	LGTH. (FEET)	QTY.	REMARKS
Processor	T3021	GPCC	T8542	3619427-00		1	Interface Cable
"	"	"	"	3619428-02		2	Interface Cable
"	"	"	"	3619443-10		2	Interface Cable
Processor	T3021	ADAPTER CHANNEL	F1276	3619427-00		1	Interface Cable
Processor	T3021	Disc File Control	T5033	3616164-XX	20	1	Interface Cable
User Receptacle	--	Disc File Control	T5033	3621344-00		1	Power Cable
User Receptacle	--	Disc Drive Cabinet	T8440	3621320-00		4	Power Cable
Disc File Control	T5033	Uniservo					

INFORMATION IS LISTED IN  
FIGURE 3-1 AND IN  
SPECIFICATION SHEET FOR CABINET



BOOK NO. MH2386 HCB - WAS USED TO COMPLETE THIS FORM.

UD1-307

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SPERRY RAND

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MH2386

Forms and Materials Preparation

Figure 3-2. Partially Completed System Cable Order Form

UNIVAC Communications/Symbiont Processor  
System

3-5. SITE LAYOUT PLAN

Scaled templates (1/4" to 1') are provided in MH2367, UNIVAC Communications/Symbiont Processor System Preinstallation Planning Materials to assist in arranging a suitable equipment layout.

Three copies of the final, approved site layout plan must accompany the cable order. All miscellaneous requirements for system installation such as end skins, corner cabinets, spacers, etc., are determined from the site layout plan.

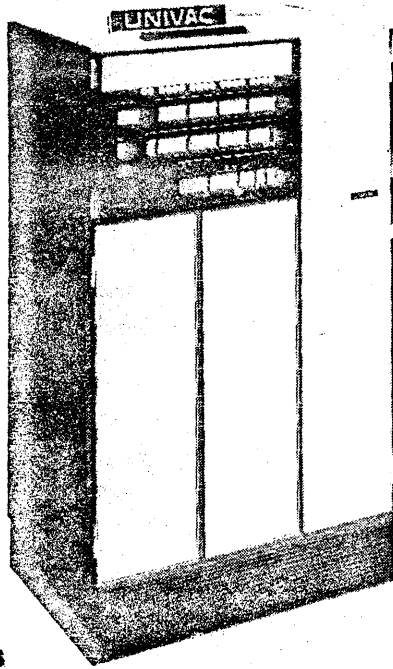
3-6. FORMS DISTRIBUTION

Send all support documentation and forms to the following location,

Sperry Univac  
Technical Support - WWCE  
2276 Highcrest Drive  
Roseville, Minnesota 55113

Attention: Preinstallation Group, M.S. 4902.





## PROCESSOR CABINET TYPE 3021

### DIMENSIONS

Width 37" (94 cm)  
Depth 26" (66 cm)  
Height 64" (163 cm) Nominal

### RECOMMENDED CLEARANCES

Front 36" (91 cm)  
Rear 36" (91 cm)  
Left 36" (91 cm)  
Right 0"

### POWER REQUIREMENTS

4.6 KVA (Processor only)

### WEIGHT

1050 lbs (477 kg)

### FLOOR LOADING

149 lbs/ft<sup>2</sup> (730 kg/m<sup>2</sup>)

### HEAT DISSIPATION

12,500 Btu/hr (3150 kcal/hr)

### AIR CIRCULATION

1050 CFM (1785 m<sup>3</sup>/hr)

Input: Raised floor or room air  
Exhaust: Into room thru top

## ELECTRICAL DETAILS

### RECOMMENDED USER CIRCUIT

60 Hz 30A-3P Breaker 120/208V or  
120/240V, 3 $\phi$ , 4  
Wire and Ground  
50 Hz 20A-3P Breaker 220/380V, 230/400V,  
or 240/415V, 3 $\phi$ ,  
4 Wire and Ground

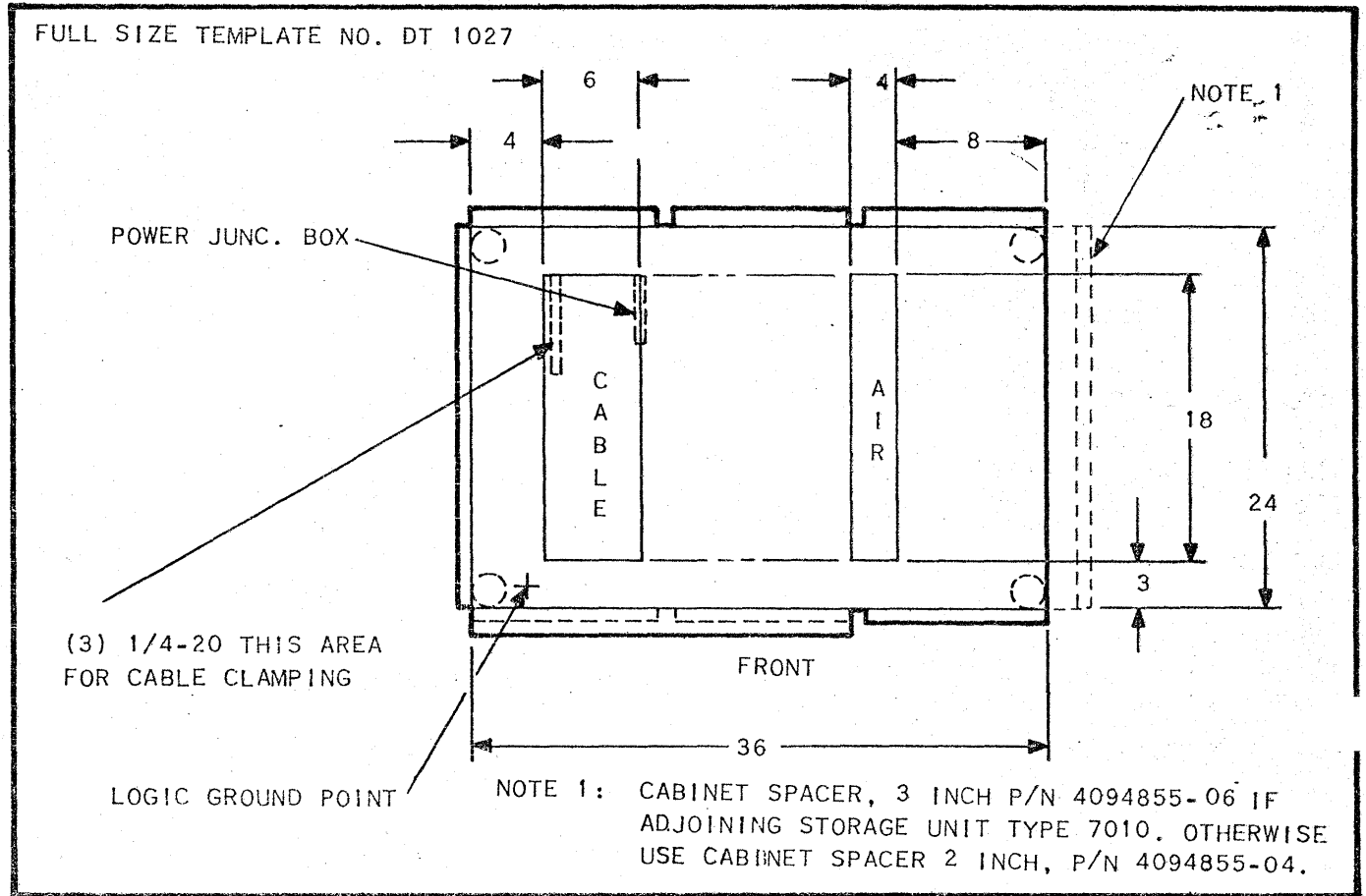
(Wire directly into Branch  
Distribution Panel)

### GROUNDING

This cabinet has isolated logic decks. A separate frame safety ground must be provided.

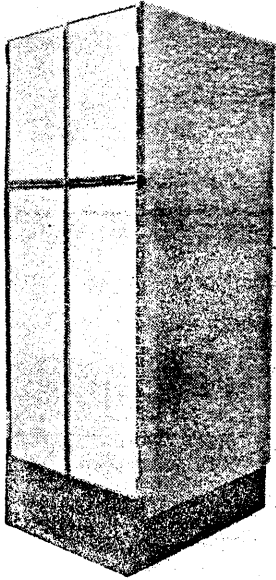
PROCESSOR CABINET  
TYPE 3021

**PLAN VIEW**



**CONFIGURATION DETAILS**

Must adjoin General Purpose Communications Cabinet or Storage Cabinet depending on the system configuration.



# GENERAL PURPOSE COMMUNICATIONS CABINET (GPCC)

TYPE 8542

## DIMENSIONS

Width 26" (66 cm)  
Depth 26" (66 cm)  
Height 64" (163 cm) Nominal

## RECOMMENDED CLEARANCES

Front 36" (91 cm)  
Rear 36" (91 cm)  
Left 0"  
Right 0"

## POWER REQUIREMENTS

1.6 KVA (From processor)

## WEIGHT

700 lbs (318 kg)

## FLOOR LOADING

149 lbs/ft<sup>2</sup> (730 kg/m<sup>2</sup>)

## HEAT DISSIPATION

4500 Btu/hr (1134 kcal/hr)

## AIR CIRCULATION

600 CFM (1019 m<sup>3</sup>/hr)

Input: Raised floor or room air

Exhaust: Into room thru top

## ELECTRICAL DETAILS

### RECOMMENDED USER CIRCUIT

Powered from processor. Add POWER REQUIREMENTS to processor.

## GROUNDING

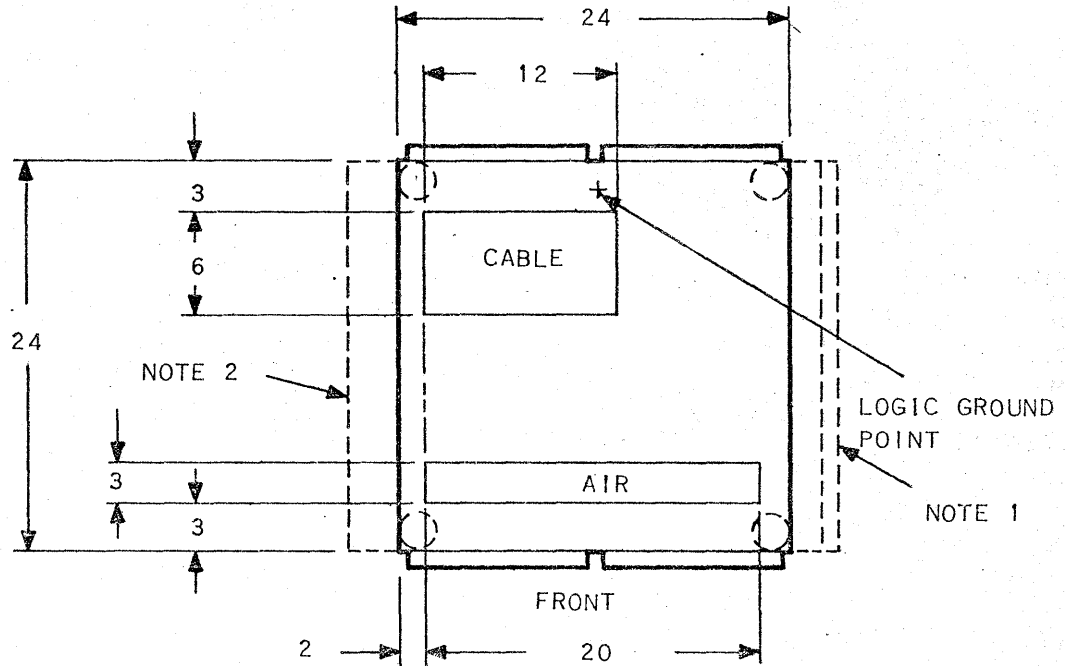
This cabinet has isolated logic decks. A separate frame safety ground must be provided.



GENERAL PURPOSE  
COMMUNICATIONS CABINET (GPCC)  
TYPE 8542

**PLAN VIEW**

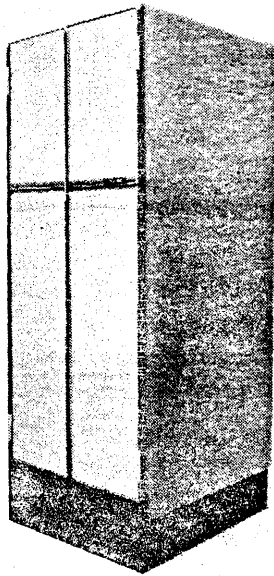
FULL SIZE TEMPLATE NO. DT 1028



- NOTE 1: CABINET SPACER, 3 INCH, P/N 4094855-06 WHEN ADJOINING STORAGE UNIT TYPE 7010. OTHERWISE USE CABINET SPACER, 2 INCH, P/N 4094855-04 WHEN ADJOINING ADJACENT CABINET.
- NOTE 2: ON EXPANSION GPCC WITH STORAGE UNIT TYPE 7010 ONLY, USE CABINET SPACER, 3 INCH, P/N 4094855-06.

**CONFIGURATION DETAILS**

Must adjoin Processor Cabinet or Storage Cabinet depending on the system configuration.



## **STORAGE CABINET**

TYPE 7026

### **DIMENSIONS**

Width 24" (61 cm)  
Depth 26" (66 cm)  
Height 64" (163 cm) Nominal

### **RECOMMENDED CLEARANCES**

Front 48" (122 cm)  
Rear 48" (122 cm)  
Left 0"  
Right 0"

### **POWER REQUIREMENTS**

1.8 KVA (From processor)

### **WEIGHT**

610 lbs (277 kg)

### **FLOOR LOADING**

141 lbs/ft<sup>2</sup> (691 kg/m<sup>2</sup>)

### **HEAT DISSIPATION**

5461 Btu/hr (1376 kcal/hr)

### **AIR CIRCULATION**

350 CFM (595 m<sup>3</sup>/hr)

Input: Raised floor or room air

Exhaust: Into room thru top

## **ELECTRICAL DETAILS**

### **RECOMMENDED USER CIRCUIT**

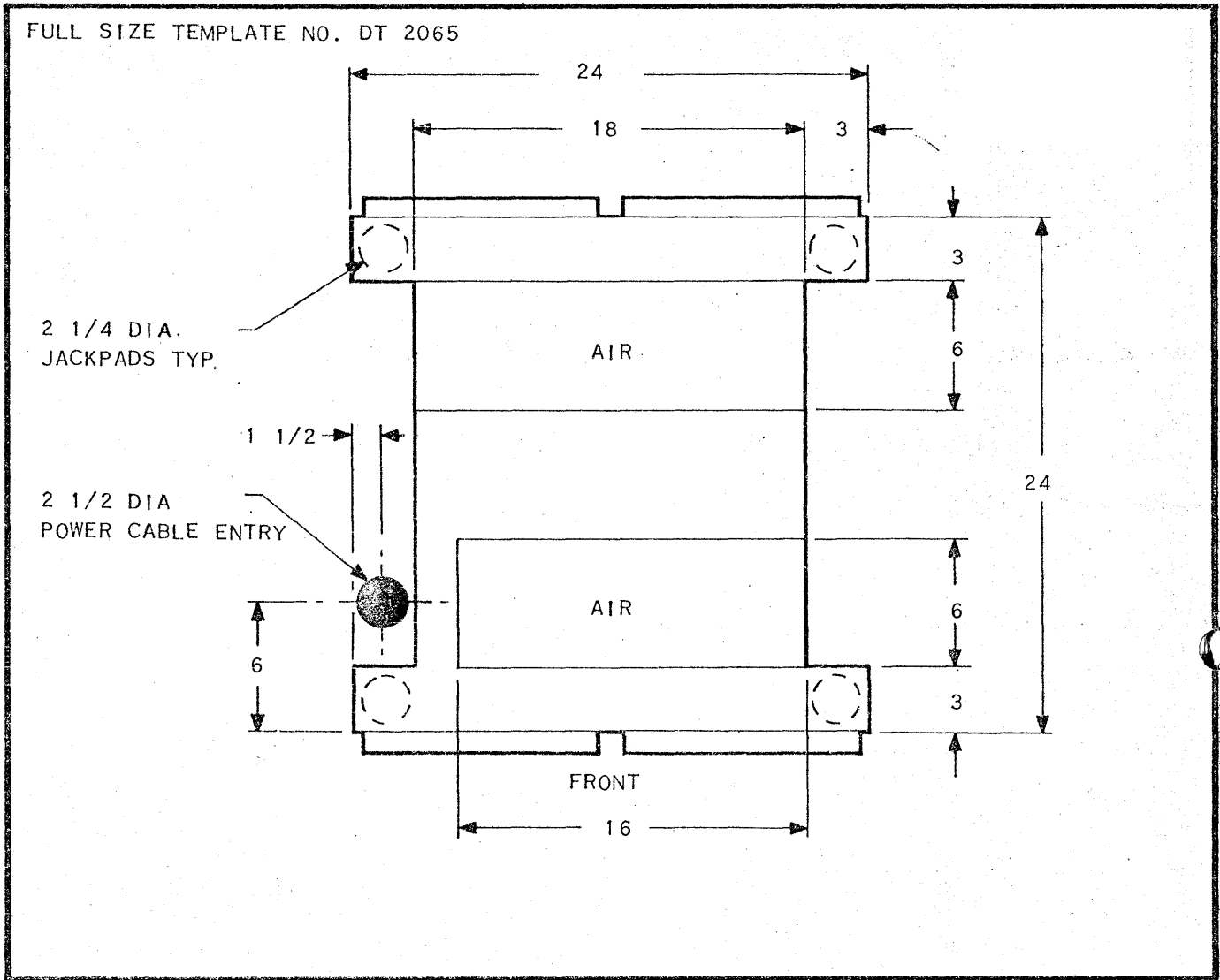
Powered from processor. Add POWER REQUIREMENTS to processor.

### **GROUNDING**

This cabinet has isolated logic decks. A separate frame safety ground must be provided.

STORAGE CABINET  
TYPE 7026

PLAN VIEW



CONFIGURATION DETAILS

Must adjoin Processor Cabinet or General Purpose Communications Cabinet depending on the system configuration.